

# HTC Gateway

## Datasheet

A-HRIO

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# 1. PREFACE

## 1.1. ABOUT THIS DOCUMENT

This document contains the technical data for the HTC Gateway. The HTC Gateway, (hereafter referred to as the **module**,) provides intelligent data routing between EtherNet/IP and legacy Hitachi IO and Drive (RIW/ROW) systems. This allows the user to integrate legacy Hitachi IO and Drives into a Rockwell Logix platform (e.g. ControlLogix or CompactLogix) with minimal effort.

## 1.2. FEATURES

The module can be configured to act as either a legacy Hitachi IO Master (RIOH Master), legacy Hitachi IO Slave (RIOH Slave), or legacy Hitachi Drive module. Data can easily be accessed in the Logix input and output assemblies.

The HTC Gateway is configured using the Aparian Slate application. This program can be downloaded from [www.aparian.com](http://www.aparian.com) free of charge.

The module also provides a range of statistics to help fault find any problems. The Hitachi interface port uses a terminal block for convenient installation.

A built-in webserver provides detailed diagnostics of system configuration and operation, including the display of Hitachi interface operation and communication statistics, without the need for any additional software.

## 1.3. ARCHITECTURE

Three example applications are described below:

The first example application uses the HTC Gateway to exchange data between legacy Hitachi IO and a ControlLogix controller. In this mode, the HTC Gateway is configured as an IO Master and will request data from input modules (e.g. Digital Inputs) and send data to output modules (e.g. Digital Outputs). In this mode legacy Hitachi IO can be left in operation whilst the user can upgrade the control system to a Rockwell Automation Logix platform.

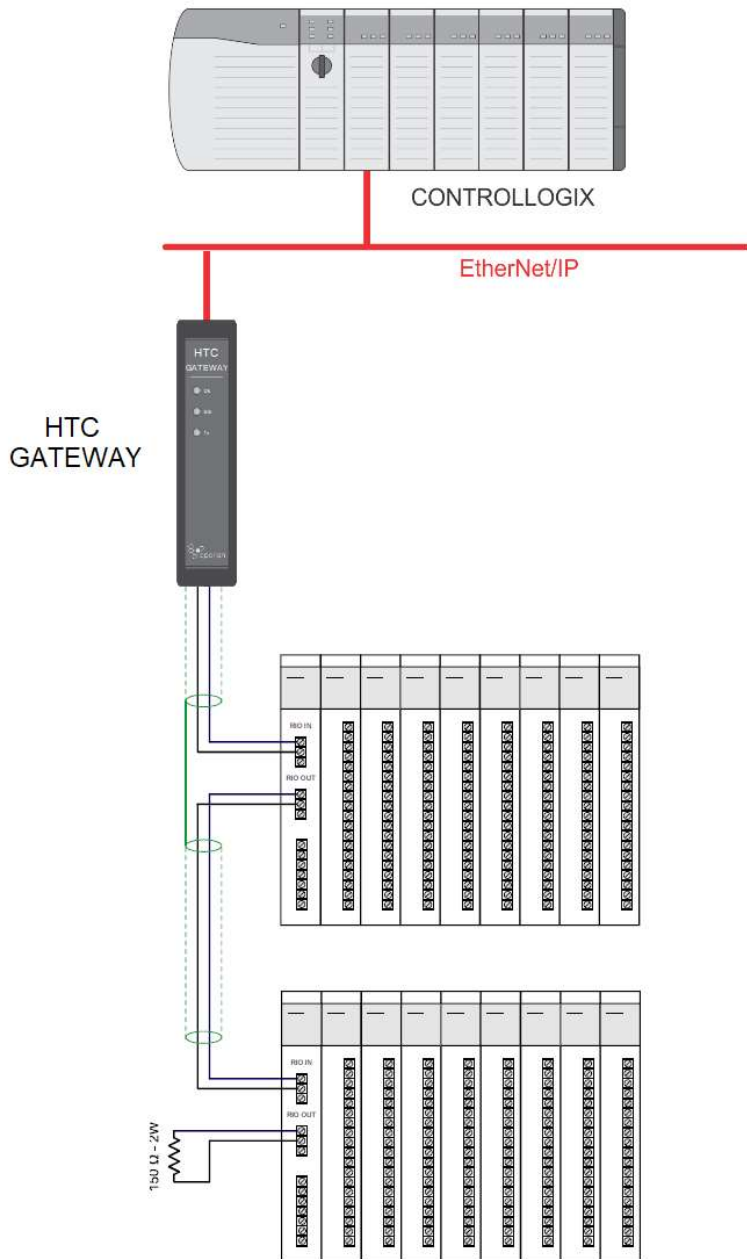


Figure 1 – Application Example 1

The second example has two HTC Gateways configured as drive interfaces and can be connected to a legacy Hitachi drive to exchange data. In this mode legacy drives can be left in operation whilst the user can upgrade the control system to an Rockwell Automation Logix platform.

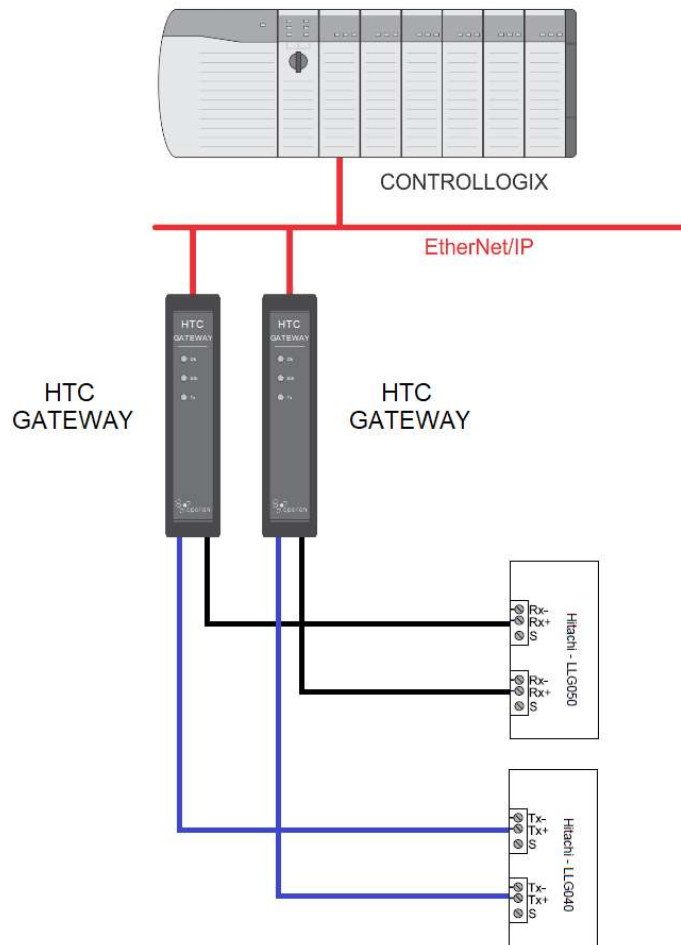


Figure 2 – Application Example 2

The third example application uses the HTC Gateway to exchange data between legacy Hitachi IO and a ControlLogix controller. In this mode, the HTC Gateway is configured as an IO Slave and will mimic legacy IO: Receiving output data from a legacy Hitachi CPU (e.g. Digital Outputs) and sending input data to the legacy Hitachi CPU. In this mode legacy Hitachi IO Masters (Hitachi CPU) can be left in operation while the user can upgrade the IO to modern Rockwell Automation IO (via a Logix platform).

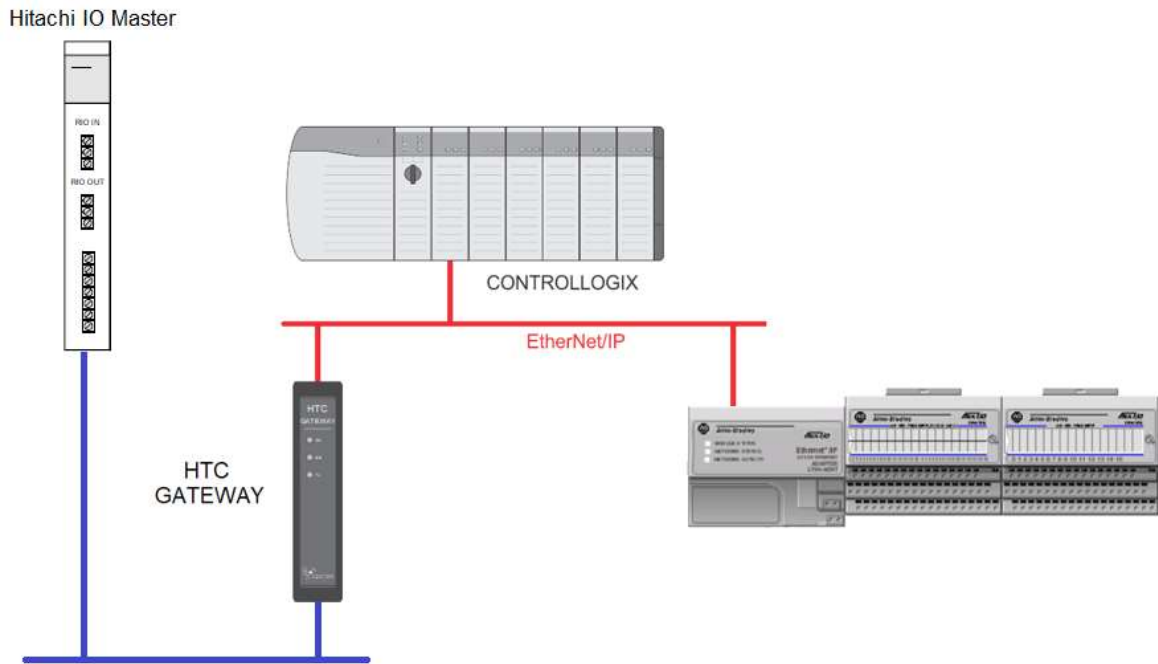


Figure 3 – Application Example 3

## 2. ETHERNET/IP NETWORK

Specification	Rating
Connector	RJ45
Conductors	CAT5 STP/UTP
ARP connections	Max 20
TCP connections	Max 20
CIP connections	Max 10
Communication rate	10/100Mbps
Duplex mode	Full / Half
Auto-MDIX support	Yes

Table 1 - Ethernet specification

## 3. HITACHI PORT

Specification	Rating
Conductor	RIOH – 22 AWG Drive – 18 AWG (distance dependent)
IO Protocol Support (RIOH)	Yes
Drive Protocol Support (RIW/ROW)	Yes
IO Slot Range	0 – 127

Table 2 – HDLC (RS485) specification

## 4. ELECTRICAL SPECIFICATIONS

Specification	Rating
Power requirements	Input: 18 – 28V DC, (70 mA @ 24 VDC)
Power consumption	1.7 W
Connector	3-way terminal

Conductors	24 – 18 AWG
Enclosure rating	IP20, NEMA/UL Open Type
Temperature	-20 – 70 °C
Earth connection	Yes, terminal based

Table 3 - Electrical specification

## 5. CERTIFICATIONS

Certification	Mark
RoHS2 Compliant	<b>RoHS2</b>

Table 4 – Certifications

## 6. DIMENSIONS

Below are the enclosure dimensions as well as the required DIN rail dimensions.

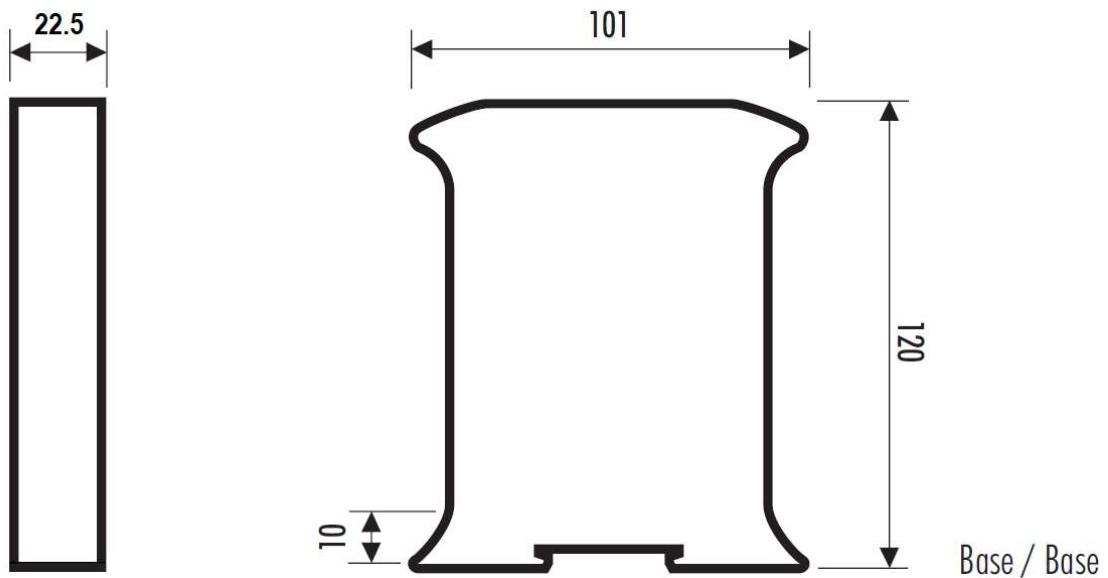


Figure 4 – HTC Gateway enclosure dimensions

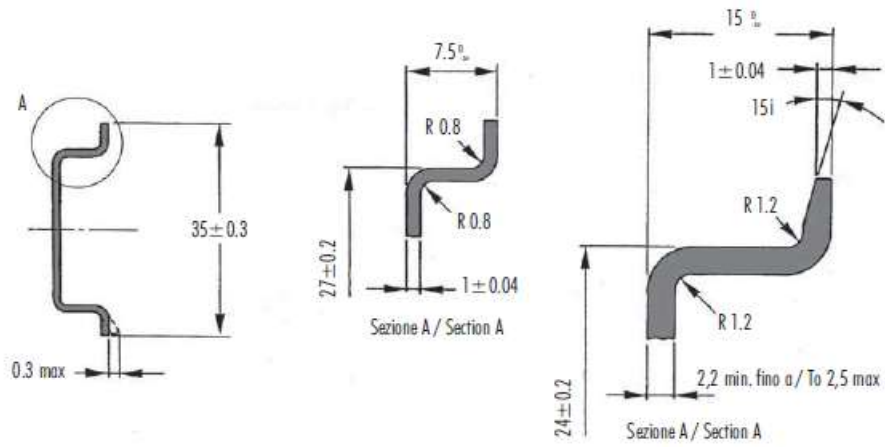


Figure 5 - Required DIN dimensions